

Choosing the right filter to meet your application demands

TECHNICAL BULLETIN

ZCore* and WellPro.Z*

Introduction

In upstream Oil & Gas production, water treatment is driven by performance and economic value. Quality requirements, as well as operating conditions, often vary. These different needs require different types of filters. To better serve these needs, Veolia has expanded its filter offering to include the new ZCore Depth Filter, a filter that serves a complementary role to the more established WellPro.Z.

Typical applications in oil and gas

Common applications in oil and gas production include produced water treatment for re-injection or disposal injection. Heavy loading and “upset” conditions can give rise to the need for a more durable, high-performance filter to achieve target quality while minimizing replacement and operating cost. In the gas market, the amine sweetening

process is an example of a demanding application where high temperature is a driving factor. Also, throughout the oil and gas production process, there are numerous streams that are less operationally challenging and require a solid, basic filtering solution.

ZCore and WellPro.Z

ZCore and WellPro.Z cover two different types of applications, both of which are common production of oil and gas. When compared to WellPro.Z, ZCore offers performance in harsher operating environments, which include heavy loading, higher temperature, and higher pressure flows.

WellPro.Z, on the other hand, is intended for streams that do not require the additional strength of the ZCore cored structure. See the Chart below for operating specifications for the two filters.

Parameter	ZCore	WellPro.Z	Meaning
<i>Efficiency</i>	Defined Efficiency (90 % at given micron ratings)	Nominal (<than 80%)	The greater ZCore removal efficiency can improve protection of equipment and downstream formations. The WellPro.Z cartridge is designed for high solids loading and longer life in typical water flood filtration applications.
Pressure Drop Limits	60 psid	25 psid	The WellPro.Z is constructed to handle the typical pressure drop and temperature requirements found in oil-field produced water applications. The ZCore extends that pressure and temperature limits of polypropylene cartridge filters to handle higher temperatures and pressure drops found in other hydrocarbon applications (amine sweetening)
Temperature	85°C (185°F)	70°C (158°F)	
Micron Ratings	0.5 -200 micron	1,5,10 and 20	

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